



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,179	08/30/2004	Hung-En Tai	LKSP0052USA	5178
27765	7590	10/31/2007		
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION			EXAMINER	
P.O. BOX 506			MOFFAT, JONATHAN	
MERRIFIELD, VA 22116			ART UNIT	PAPER NUMBER
			2863	
NOTIFICATION DATE		DELIVERY MODE		
10/31/2007		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu.uspto@gmail.com
Patent.admin.uspto.Rcv@naipo.com
mis.ap.uspto@naipo.com.tw

Office Action Summary	Application No.	Applicant(s)
	10/711,179	TAI ET AL.
Examiner	Art Unit	
Jonathan Moffat	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 30 August 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 30 August 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: Applicant is advised to review the specification to locate minor typographical errors. For example, in paragraph 6, on the first line; “As commonly known” should be “As is commonly known”, “equipments” should be “equipment”, etc.

Appropriate correction is required.

Claim Objections

Claims 1 and 3 are objected to because of the following informalities:

Claim 1 is objected to as it does not appear to have any end result. It may be the applicant’s intent to leave the claim open-ended so that any result or type of analysis of the classified data is applicable. If this is not the case, the claim should be amended to include reference to some sort of fault or event determination.

Claim 3 is objected to for being somewhat unclear. After analysis of the specification, paragraph 18, it appears to the examiner that the intent of this claim is that thresholds be used for separation which are related to or determined by the wafer manufacturing step in question. It is requested that the applicant amend this claim to make this clearer, especially if the examiner’s interpretation is deficient.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1.

Claims 1-2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Shirai (US pat pub 20020170022).

With respect to claim 1, Shirai discloses a method comprising:

- (a) Extracting a plurality of raw data from the fault detection and classification system (Fig 5 item 21 and Fig 9 item S1).
- (b) Separating the raw data for generating classified data according to a predetermined filtering condition (Fig 5 items 21-23 and Fig 9 item S2).
- (c) Utilizing a predetermined statistical method for analyzing the classified data (Fig 1 item 25 and Fig 9 item S3). Shirai further discloses a motivation for such analysis (paragraph 0071), which is similar to that of applicant's paragraph 6

With respect to claim 2, Shirai discloses that the predetermined filtering condition is used for selecting data corresponding to a particular wafer manufacturing step from the raw data (Fig 8).

With respect to claim 4, Shirai discloses that the predetermined statistical method is a one-way variance analysis, a data mining operation, or a discriminant analysis (Fig 9 item S3).

2.

Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Gorin (US pat pub 20040006447).

With respect to claim 1, Gorin discloses a method comprising:

- (a) Extracting a plurality of raw data from the fault detection and classification system (Fig 3 item 312).
- (b) Separating the raw data for generating classified data according to a predetermined filtering condition (Fig 3 item 414 and 322).
- (c) Utilizing a predetermined statistical method for analyzing the classified data (Fig 3 item 316).

With respect to claim 2, Gorin discloses that the predetermined filtering condition is used for selecting data corresponding to a particular wafer manufacturing step from the raw data (Fig 3 item 318). As stated in the figure, the data is sorted for each device and test. One of ordinary skill in the art would understand that each step corresponds to a particular device and test.

With respect to claim 3, Gorin discloses that the predetermined filtering condition corresponds to a threshold value of the particular wafer manufacturing step and step (b) generates the classified data by selecting data matching the threshold value from the raw data (paragraphs 0035-0037 and 0071). As in the examiner's above explanation, this is interpreted as meaning that thresholds are set based upon the step or equipment to which they correspond. The outlier thresholds of Gorin naturally correspond to the step or machine in question. If they didn't then the device would not function. More specifically, the characteristics of the machine or step

Art Unit: 2863

must be known before thresholds can be defined and if these thresholds did not correspond to the step or machine in question, they would potentially overlook pertinent data.

With respect to claim 4, Gorin discloses that the predetermined statistical method is a one-way variance analysis, a data mining operation, or a discriminant analysis (Fig 3).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Moffat whose telephone number is (571) 272-2255. The examiner can normally be reached on Mon-Fri, from 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/10/07

JM *[Signature]*

BRYAN BUI
PRIMARY EXAMINER

[Signature]
10/25/07